

**A RESOLUTION BY
CITY UTILITIES COMMITTEE**

A RESOLUTION AUTHORIZING THE MAYOR, OR HER DESIGNEE, TO ISSUE A NOTICE TO PROCEED WITH CH2MHILL/WRJ-JV FOR FC7619-03C, ANNUAL CONTRACT FOR ARCHITECTURAL AND ENGINEERING SERVICES, FOR THE PURPOSE OF PERFORMING CERTAIN ENGINEERING SERVICES THE CITY MUST COMPLETE AS A RESULT OF CLOSING ITS LANDFILLS AND PURSANT TO THE STATE OF GEORGIA RULES AND REGULATIONS AND FOR OTHER COMPLIANCE PURPOSES, ON BEHALF OF THE DEPARTMENT OF PUBLIC WORKS, IN AN AMOUNT NOT TO EXCEED ONE MILLION NINE HUNDRED SEVENTY SEVEN THOUSAND THREE HUNDRED THIRTY FOUR DOLLARS (\$1,977,334.00) WITH ALL CONTRACED WORK BEING CHARGED TO AND PAID FROM FUND DEPARTMENT ORGANIZATION AND ACCOUNT NUMBER: (FDOA) 5401 (SOLID WASTE SERVICES REVENUE FUND), 130212 (DPW LANDFILL CLOSURE AND POST CLOSURE), 5212001 (CONSULTING/PROFESSIONAL SERVICES), 4560000 (CLOSURE AND POSTCLOSURE CARE); AND FOR OTHER PURPOSES.

WHEREAS, the City of Atlanta ("City") is responsible for maintenance and operation of its closed landfills; and

WHEREAS, the City did enter into FC7619-03C, Annual contract for Architectural and Engineering Services; and

WHEREAS, the Department of Public Works does require groundwater sampling, testing, analytical services, report writing, and other professional consultation and engineering services at it four closed landfills and at various other locations; and

WHEREAS, the Commissioner of the Department of Public Works and the Chief Procurement Officer have recommended that CH2MHILL/WRJ-JV provide engineering and consulting services necessary to satisfy the requirements of the Georgia Environmental Protection Division (EPD) and to maintain a satisfactory compliance status.

NOW, THEREFORE, IT IS HEREBY ORDAINED BY THE COUNCIL OF THE CITY OF ATLANTA, GEORGIA, that the Mayor be and is hereby authorized to approve a notice to proceed with CH2MHILL/WRJ JV for FC-7619-03-C, Annual Contract for Architectural and Engineering Services on behalf of the Department of Public Works in an amount not to exceed One Million Nine Hundred Seventy Seven Thousand Three Hundred Thirty Four Dollars (\$1,977,334.00).

BE IT FURTHER RESOLVED, that the Chief Procurement Officer be and is hereby directed to prepare an appropriate contractual agreement for execution by the Mayor to be approved by the City Attorney as to form.

BE IT FURTHER RESOLVED, that this notice to proceed should not become binding on the City, and the City shall incur no liability upon same until such contract has been

reviewed by the City Attorney and approved as to form, attested to by the Municipal Clerk, executed by the Mayor, and delivered to CH2MHILL/WRJ JV.

BE IT FINALLY RESOLVED, that all services for said notice to proceed shall be charged to and paid from Fund Department Organization and Account Number (FDOA) 5401 (Solid Waste Services Revenue Fund), 130212 (DPW Landfill Closure and Post Closure), 5212001 (Consulting/Professional Services), 4560000 (Closure and Post Closure Care).

Part II: Legislative White Paper: (This portion of the Legislative Request Form will be shared with City Council members and staff)

A. To be completed by Legislative Counsel:

Committee of Purview: City Utilities Committee

Caption: A RESOLUTION AUTHORIZING THE MAYOR, OR HER DESIGNEE, TO ISSUE A NOTICE TO PROCEED WITH CH2MHILL/WRJ-JV FOR FC7619-03C, ANNUAL CONTRACT FOR ARCHITECTURAL AND ENGINEERING SERVICES, FOR THE PURPOSE OF PERFORMING CERTAIN ENGINEERING SERVICES THE CITY MUST COMPLETE AS A RESULT OF CLOSING ITS LANDFILLS AND PRSANT TO THE STATE OF GEORGIA RULES AND REGULATIONS AND FOR OTHER COMPLIANCE PURPOSES, ON BEHALF OF THE DEPARTMENT OF PUBLIC WORKS, IN AN AMOUNT NOT TO EXCEED ONE MILLION NINE HUNDRED SEVENTY SEVEN THOUSAND THRE HUNDRED THIRTY FOUR DOLLARS (\$1,977,334.00) WITH ALL CONTRACED WORK BEING CHARGED TO AND PAID FROM FUND DEPARTMENT ORGANIZATION AND ACCOUNT NUMBER: (FDOA) 5401 (SOLID WASTE SERVICES REVENUE FUND), 130212 (DPW LANDFILL CLOSURE AND POST CLOSURE), 5212001(CONSULTING/PROFESSIONAL SERVICES), 4560000 (CLOSURE AND POSTCLOSURE CARE); AND FOR OTHER PURPOSES.

Council Meeting Date: November 3, 2008

Requesting Dept.: Public Works

B. To be completed by the department:

1. Please provide a summary of the purpose of this legislation (Justification Statement).

The purpose of this legislation is to authorize additional funding for: 1.) continuing regulatory compliance as part of EPD approved closure/post-closure care at four closed City of Atlanta landfills for \$312,447; 2.) additional \$753,415 for compliance construction per EPD Consent Order (EPD-SW-2035); and 3.) regulatory reporting and engineering services for \$911,472.

2. Please provide background information regarding this legislation.

To conduct semi-annual groundwater and surface water monitoring and reporting at each landfill in accordance with the EPD-approved Groundwater Monitoring Plan.

To provide ongoing post-closure care at the City's four closed landfills to secure and maintain regulatory compliance with EPD.

To provide regulatory interface with EPD.

To provide general engineering consulting services as needed in support of operation and maintenance (O&M) of the closed landfills, corrective actions to address groundwater and landfill methane gas issues if required by EPD.

To prepare an Assessment of Corrective Measures (ACM) report, a Corrective Action Plan (CAP) report, and an ACM Public meeting for the Key East Road Landfill.

To install monitoring wells for impacted groundwater and methane delineation at the Key Road Landfill and Gun Club Road Landfill.

To implement on-going phased construction of the EPD-approved methane remediation plans (MRPs) at the Key and Cascade Road Landfills.

3. If Applicable/Known:

(a) Contract Type (e.g. Professional Services, Construction Agreement, etc):

(b) Source Selection:

(c) Bids/Proposals Due:

(d) Invitations Issued:

(e) Number of Bids:

(f) Proposals Received:

(g) Bidders/Proponents:

(h) Term of Contract:

4. Fund Account Center:

5. Source of Funds:

6. Fiscal Impact: \$1,977,334.00

7. Method of Cost Recovery:

LEGISLATIVE SUMMARY

TO: City Utilities

CAPTION

A RESOLUTION AUTHORIZING THE MAYOR OR HER DESIGNEE TO ISSUE A NOTICE TO PROCEED WITH CH2MHILL/WRJ-JV FOR FC7619-03C, ANNUAL CONTRACT FOR ARCHITECTURAL AND ENGINEERING SERVICES, FOR THE PURPOSE OF PERFORMING CERTAIN ENGINEERING SERVICES THE CITY MUST COMPLETE AS A RESULT OF CLOSING ITS LANDFILLS AND PURSANT TO THE STATE OF GEORGIA RULES AND REGULATIONS AND FOR OTHER COMPLIANCE PURPOSES, ON BEHALF OF THE DEPARTMENT OF PUBLIC WORKS IN AN AMOUNT NOT TO EXCEED ONE MILLION NINE HUNDRED SEVENTY SEVEN THOUSAND THREE HUNDRED THIRTY FOUR DOLLARS (\$1,977,334.00): ALL CONTRACED WORK SHALL BE CHARGED TO AND PAID FROM FUND DEPARTMENT ORGANIZATION AND ACCOUNT NUMBER (FDOA) 5401 (SOLID WASTE SERVICES REVENUE FUND), 130212 (DPW LANDFILL CLOSURE AND POST CLOSURE), 5212001 (CONSULTING/PROFESSIONAL SERVICES), 4560000 (CLOSURE AND POSTCLOSURE CARE).

Committee Meeting Date: October 28, 2008

Council Meeting Date: November 3, 2008

Legislation Title: Task Order, 7619-03C, CH2M Hill

Requesting Dept.: Public Works

Contract Type: Professional Services RFP

Advertisement: October 26, 2003

Bids/Proposals Due: January 7, 2004

Invitations Mailed: 146

Bids/Proposals Received: 12

Arcadis/BPA-(Brindley Pieters & Associates) – Joint Venture
Atlanta Architects & Engineers, Joint Venture
Atlanta Services Group, a Joint Venture
Infrastructure Partners-Joint Venture (B & Jackson/ HDR/
Malcom Pirnie)
Brown and Caldwell/Deloan Hampton & Associates/Long
Engineering Inc. - Joint Venture
CH2M Hill/Williams-Russell and Johnson – Joint Venture

Earthtech/IMCo Joint Venture
HTL - Harrington, Tetra Tech & Lowe-Joint Venture
JP² (Jacobs, Prad, PBS&J) – Joint Venture
Metcalf & Eddy/Cardozo Engineering-Joint Venture
Parsons Brinckerhoff & Khafra-Joint Venture
Shaw Environmental Inc. /AIM Partners, PLC- JV

Bidders/Proponents:

- (1) CH2M Hill/Williams-Russell and Johnson
- (2) Atlanta Services Group
- (3) JP2 (Jacobs, Prad, PBS&J)
- (4) Shaw/ Aim, Joint Venture
- (5) Metcalf & Eddy/Cardozo Engineering, Joint Venture
- (6) Arcadis/Brindley Pieters & Associates, Joint Venture

Contractor:

CH2M Hill/Williams-Russell and Johnson – Joint Venture

Estimated Value:

\$ 1,977,334.00

Scope Summary:

CH2M Hill / William- Russell and Johnson, Inc. will provide ongoing post-closure care services at four landfills owned by the City. The work will occur from the third quarter of 2008 through the second quarter of 2009..

Background:

Original executed on May 17, 2004, expired on May 16, 2006

A Ninety Day extension effective term began on May 17, 2006 and expired on August 15, 2006

Renewal Agreement No. 1 effective term began on August 16, 2006 to August 15, 2007

Renewal Agreement No.2 effective term from August 16, 2007 to August 15, 2008

Renewal Agreement No.3 effective term from August 16, 2008 to August 15, 2009

Evaluation Team:

DPRCA, DWM, DPW, DPCD, OCC and Risk Management

Term of Contract:

Two (2) years with an option to renew for three (3) one (1) year periods

Fund Account Centers:

130212 (DPW LANDFILL CLOSURE AND
POST CLOSURE), 5212001

**(CONSULTING/PROFESSIONAL
SERVICES), 4560000 (CLOSURE AND
POSTCLOSURE CARE)**

Prepared By:

Anthony Stanley

Contact Number:

404-330-6384

Project

Participation:

CH2M Hill, Inc./Williams-Russell and Johnson, Inc. a
JV (15 pts.)

Williams-Russell and Johnson	AABE	32%
C.E.R.M.	AABE	4%
Precision Engineering and Surveying, Inc.	AABE	4%
Desmear Systems, Inc.	AABE	3%
Cheeks/Hornbein & Associates	AABE	4%
Smith Real Estate Services, Inc.	FBE	4%
CSA Central, Inc.	HBE	3%
Eagle Environmental Group	FBE	2%
Neil Engineering	FBE	2%
RCS Enterprises, Inc.	FBE	2%
D. Clark Harris	FBE	2%
PEQ	FBE	3%
Clarification and Mediation	FBE	3%
Participation Total		68%



CH2MHILL



williams-russell and johnson, inc.
engineers • architects • planners

CH2M HILL

Northpark 400

1000 Abernathy Road, Suite 1600

Atlanta, GA

30328

Tel 770.604.9095

Fax 770.604.9183

September 15, 2008

Mr. James Swope
Department of Public Works, Solid Waste Services
68 Mitchell Street S.W.
Suite 4800 City Hall South
Atlanta, GA 30335-0324

Subject: Third Quarter 2008 through the Second Quarter of 2009
Proposal for Ongoing Post-closure Care Support
Key Road, East Confederate Avenue, Gun Club Road, and Cascade Road Landfills
City of Atlanta A/E Services Contract - FC No. FC-7619-04C

Dear Mr. Swope:

The CH2M HILL/WRJ, Incorporated Joint Venture (JV) appreciates the opportunity to be of continued service to the City of Atlanta (City). This proposal presents our proposed scope of work to provide ongoing post-closure care services at four landfills owned by the City. The work will occur from the third quarter of 2008 through the second quarter of 2009 at the:

- Key Road Landfill,
- East Confederate Avenue Landfill,
- Cascade Road Landfill, and
- Gun Club Road Landfill.

Purpose and Scope

The objectives of the work that will be performed between July 1, 2008 and June 30, 2009 (third quarter 2008 through second quarter 2009) are to:

- Collect groundwater and surface water samples semi-annually in accordance with the Georgia Environmental Protection Division (EPD)-approved monitoring program for each landfill.
- Provide ongoing post-closure care at the City's four closed landfills to secure and maintain regulatory compliance with EPD.
- Provide regulatory support for the City and interface with EPD.

- Provide general engineering consulting services as needed in support of operation and maintenance (O&M) of the closed landfills, corrective actions to address groundwater and landfill methane gas issues if required by EPD.
- Prepare an Assessment of Corrective Measures (ACM) and Corrective Action Plan (CAP) report for the Key East Road Landfill.
- Install monitor wells for impacted groundwater and methane delineation at the Key Road Landfill and Gun Club Road Landfill.
- Assist the City with preparation of public meetings as required by the ACM process for the Key Road Landfill.
- Implement on-going phased construction of the EPD-approved methane remediation plans (MRPs) at the Key and Cascade Road Landfills.
- Expand the methane monitoring plans as required by EPD following the City's acquisition of properties that adjoin the southern and eastern boundaries of the Gun Club Road Landfill.
- Prepare a modification for expansion of the existing methane monitoring network at the Gun Club Road Landfill.
- Install a groundwater remediation system in accordance with the EPD-approved Corrective Action Plan at the Gun Club Road Landfill.
- Prepare a minor modification for the acquisition of buffer properties that adjoin the Cascade Road Landfill.
- Perform real-estate appraisal for properties that adjoin the southern portion to the Cascade Road Landfill.
- Perform a viability review of a landfill gas-to-energy (LFGTE) system located at the Key Road Landfill.

The following tasks will be performed to fulfill these objectives:

- **Task 1.0 - Groundwater & Surface Water Monitoring and Reporting**
- **Task 2.0 - Ongoing Post-Closure Care Construction and Maintenance**
- **Task 3.0 - Engineering & Regulatory Services**
 - **Task 3.1 - General Services**
 - **Task 3.2 - Key Road Landfill ACM Activities**
 - **Task 3.3 - Key Road Landfill Methane Compliance Assessment**

- Task 3.4 - Gun Club Road Landfill Methane Monitor Network Revision & CAP Implementation
- Task 3.5 - Cascade Road Buffer Property Activities
- Task 3.6 - Key Road Landfill Gas-to-Energy Viability Review

Task 1.0 - Ground Water & Surface Water Monitoring and Reporting

The City is required to conduct semi-annual groundwater and surface water monitoring at each landfill in accordance with the EPD-approved Groundwater Monitoring Plan. The monitoring includes the collection and analysis of groundwater and surface water samples and submittal of monitoring reports to the EPD. The JV understands that the City will provide the JV and its subcontractor's access to each of the landfill sites to perform the groundwater and surface water sampling tasks.

The work to be performed in Task 1.0 is discussed below.

Sample Collection and Analyses

The JV will collect groundwater samples from the existing monitoring wells at the landfills and surface water samples from the designated locations specified in the EPD-approved Groundwater Monitoring Plan for each landfill.

The monitoring wells and piezometers at each landfill site will be gauged at the beginning of each sampling event. Groundwater sampling will consist of purging three times the calculated volume of water in each well and documenting measured water quality parameters such as pH, temperature, dissolved oxygen (DO), conductivity, oxidation-reduction potential (ORP), and turbidity during the purging process. The purge water from the sampling events at the Cascade Road and Key Road Landfills will be disposed by City personnel at the respective site's landfill gas system. The purge water from the sampling events at the Gun Club Road and East Confederate Avenue Landfills will be transported and disposed by City personnel at the Key Road Landfill via its landfill gas system. Based on historical groundwater analyses, the JV has assumed that the water generated during purging will be non-hazardous.

The groundwater samples will be shipped to a Georgia-certified laboratory for chemical analysis. The JV understands that the testing will include the collection of Appendix I parameters twice a year (November 2008 and May 2009) and Appendix II (see Table 1) parameters once a year (May 2009). Any Appendix II parameter that is detected is required to be analyzed in all wells for the subsequent sampling event.

The JV has assumed that an appropriate number of quality control (QC) samples will be collected during the sampling events. These samples are estimated to include: 10 percent field duplicates and trip blanks, 5 percent field blanks, one set of matrix spike and matrix spike duplicates, and equipment blanks as necessary. The cost proposal is based on the

number of wells and the number of surface water and associated quality assurance/quality control (QA/QC) samples to be collected at each of the four landfill sites listed in Table 2.

The sample results will be provided in draft form within 21 calendar days of sample receipt by the laboratory, followed by final reporting within 45 calendar days of sample receipt by the laboratory. The laboratory will also perform the necessary QA/QC analyses, checks, and documentation for the specified level of data quality. The laboratory will forward the results electronically for incorporation into CH2M HILL's data management system.

Reporting

Semi-annual reports will be issued for each landfill upon the receipt of groundwater and surface water test results. The reports will include summaries of the field activities performed, a summary of investigation findings, and conclusions and recommendations. Tables, figures, and appendices will also be included with each report. The JV will prepare draft and final versions of each report. The draft will be submitted to the City for review and comment. Following incorporation of the City's comments, the final report will be submitted to EPD.

Task 2.0 – Ongoing Post-Closure Care Construction and Maintenance

Cascade Road and Key Road Landfills

On December 2, 2005, the City entered into Consent Order No. EPD-SW-2035 with the Georgia EPD to address groundwater impacts and methane gas exceedances at the Cascade Road, East Confederate Avenue, and Key Road Landfills. Included in this order was a requirement for the City to either initiate the approved expansion to the existing gas collection system, or submit a methane remediation plan (MRP) for review and approval within 60 days of issuance of the Consent Order.

The Consent Order requires that the City reduce methane levels to below the regulatory standard. Methane concentrations cannot exceed 100 percent of the lower explosive limit (LEL) in the compliance methane monitor probes (MMPs) at the Cascade and Key Road Landfills within 270 days of the executed Consent Order. If methane levels are not below the regulatory standard 270 days after the date of the signed Order, the City will be subject to a \$100,000 fine. In accordance with Consent Order, the City has implemented the EPD-approved (approved February 6, 2006), phased-approach MRPs at both landfills. Conditions of the Consent Order have been met; however methane exceedances remain in the following areas:

Cascade Road Landfill - Historical methane exceedances have occurred at MMPs MM-1, MM-5, MM-10, and MM-11. Since June 2007, MM-8 and MM-10 have been consistently above the LEL.

Key Road Landfill - Historical methane exceedances have occurred at MMPs MM-1, MM-2, MM-3, MM-10, MM-11, MM-17, and MM-18. Since June 2007, MM-18 has been consistently above the LEL.

In 2006 and the first quarter of 2007, expansions, refurbishments, and upgrades were made to both the Cascade Road and Key Road landfill gas extraction systems to reduce methane level in the above listed areas, however, due to an unexpected increase in material costs caused by the aftermath of Hurricane Katrina, the size of each expansion was significantly reduced to meet project budget constraints for both sites. Therefore, the expansions made were only partially effective at achieving methane compliance. To meet compliance in these remaining areas, the upgrades, discussed below, will be performed at each site:

Cascade Road Landfill

- Refurbish the existing header and lateral of the landfill gas (LFG) extraction system to remove partial blockages to improve system air flow. Install two dewatering sumps with up to two (2) pneumatic dewatering pumps in gas extraction wells with discharge to the existing condensate tank. These LFG system header/lateral repairs, will not to exceed 300 lineal feet.
- Install up to four active (vacuum) vertical gas extraction wells (36-inch ID boring with an 8-inch well) within the waste footprint between the existing extraction wells and applicable compliance points. These wells will be installed up to 60-feet deep and will be connected to the existing gas extraction system. Connecting these wells to existing LFG system header/lateral will not exceed 2,000 lineal feet.
- JV will perform up to three (3) post-construction assessments to balance the LFG wellfield and flare system.
- Prepare a professionally-licensed survey (NAD83 standards) of the completed MRP system for MRP as-built drawings.
- Submit MRP as-built drawings with a written request to EPD for a minor modification to the Solid Waste Permit.
- The upgrades are estimated to require approximately 45 to 90 field days to complete. This estimate only includes seven (7) days of stand-by for delays caused by access restrictions, inclement weather, contractor unavailability, etc.

Key Road Landfill

- Install up to four active (vacuum) vertical gas extraction wells (36-inch ID boring with an 8-inch well), within the waste footprint, between the existing extraction wells and applicable compliance points. These wells will be installed up to 30-feet deep and will be connected to the existing gas extraction system. Connecting these wells to existing LFG system header/lateral connections will not exceed 200 lineal feet.

Mr. Swope
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- JV will perform up to three (3) post-construction assessments to balance the LFG wellfield and flare system.
- Prepare a professionally-licensed survey (NAD83 standards) of the completed MRP system for MRP as-built drawings.
- Submit MRP as-built drawings with a written request to EPD for a minor modification to the Solid Waste Permit.
- The upgrades are estimated to require approximately 16 field days to complete. This estimate includes only four (4) days of stand-by for delays caused by access restrictions, inclement weather, contractor unavailability, etc.

Assumptions for Cascade Road and Key Road Landfill On-going Phased-MRP Activities:

- A JV engineer or geologist will observe all site work.
- The EPD will approve the proposed upgrades to the gas extraction systems. One draft and one revision of the MRPs for each site are assumed.
- Landfill gas and extraction system data provided by the City are accurate, representative, and timely (within 7 calendar days) for use in the development and implementation of the landfill system upgrades.
- The JV understands that the existing landfill gas extraction system is operating as designed and is adequate to provide additional vacuum and landfill gas treatment capacity. This understanding is based on design information and discussions with City personnel.
- As-built information provided by the City will be accurate and adequate to design and install the upgrades.
- Disposal of condensate tank contents will be the responsibility of the City.
- Costs are based on current market prices for materials and equipment rentals. City agrees to pay actual costs at the time of construction.
- Out-of-scope upgrade request that results in subcontractor downtime may be subject to a subcontractor stand-by rate of \$475/hour.
- JV will make reasonable attempts to place waste generated from subsurface activities (i.e., trenching and drilling) back into the excavation from which it originated. The disposal of materials that cannot be backfilled on site will be the responsibility of the City.
- The City will provide earthen borrow material within 1-mile haul distant to from the applicable site work. The JV understands this borrow material will be free of hazardous or toxic contaminants, rocks larger than 3 inches, roots other organic matter, ashes,

cinders, trash, debris, and other deleterious materials. The JV will be responsible for excavating, transporting, and placing the borrow material. No sampling of the borrow material will be performed by the JV of the borrow material source.

- JV will make all reasonable attempts to perform construction above the landfill cap. Should any pipe construction be required below the landfill cap, the landfill cap will be repaired using geosynthetic clay liner (GCL).
- Upgrades are limited to areas of concern based on 2007 and 2008 methane gas exceedences. Repair of non-operational or damaged portions of the system outside of these areas are not included in the scope.
- The amount of time an excavation will be opened is expected to be less than three days and odors associated with the excavation work are expected to be minor. The JV has assumed odor control measures will not be required and these costs are not included. All excavations will be closed or covered at the end of each work day by the subcontractor.
- JV will perform air monitoring at the work site and will ventilate using fans or other means as required to maintain safe working conditions.
- The JV understands that the City will identify and mark all underground portions of the gas extraction system prior to construction. The JV will make reasonable efforts to avoid damaging the existing gas extraction system during construction. Damage to marked locations of the gas extraction system, by the JV, will be repaired by the JV at no cost to the City.
- No allowance for repairing damage to unmarked components of the existing gas extraction system is included in this proposal. The JV will repair such damage on a time and material basis as an additional cost to the City.
- The City will accept the work and consider it complete at the conclusion of field work. Any repairs or modifications required by the City, after the City has accepted the work, will be performed on a time and material basis as an additional cost to the City.

Task 3.0 – Engineering & Regulatory Services

The JV has included this task to account for the following activities that may arise between July 1, 2008 and June 30, 2009:

Task 3.1 - General Services

- Developing responses to EPD comments and directives (Consent Order[s], Notice of Violations [NOVs], Notice of Deficiencies [NODs]) associated with landfill compliance issues. For costing purposes, the JV has assumed that we will respond to two response letters issued by the EPD.

- The JV will provide up to \$120,000 in construction/materials services and up to \$50,000 in management and consulting services for the City for on-call, post-closure care services for the four closed landfills. These services are anticipated to be actions based on responses to EPD comments and directives from Consent Order(s) NOV's, NOD's and other associated with landfill compliance issues (note above bullet).
- Preparing for and attending two meetings with the EPD to discuss landfill compliance issues. The JV assumes up to two days will be required to prepare for each meeting, each meeting will be attended by three JV personnel, and each meeting will be held at EPD headquarters.
- Preparing for and attending 30 meetings with City personnel to update the commissioner and his staff on the status of activities at each of the four landfill sites.
- The JV will provide the City with regulatory support for the restoration of the Intrenchment Creek in the area of MM-19 and KR-GWC-4 at the Key Road Landfill and prepare for and attend up to 5 meetings with City personnel, its contractors, and/or EPD.

Task 3.2 - Key Road Landfill Assessment of Corrective Measures Activities

Methylene chloride was detected above the GWPS in KR-GWC-4 during the June 2007 sampling event. A statistical comparison of the parameter concentration to the GWPS was conducted and this comparison indicated that methylene chloride was significantly above the GWPS.

Task 3.2.1 - KR-GWC-4 Methylene Chloride Delineation & Reinstallation of MM-19

To delineate methylene chloride in the area of KR-GWC-4 the JV will perform the following:

- The JV will install a new vertical delineation well (KR-GWC-4D), and new horizontal delineation well (KR-GWC-13), and abandon and reinstall MM-19. Soil cuttings and waste generated during construction/drilling will be containerized by the contractor(s) and disposed by the City.
- Following these drilling activities, the JV will sample KR-GWC-4, -4D, and -13 for VOCs (EPA SW-846 8260B) within 10 calendar days of the last installed groundwater monitor well.

Task 3.2.2 - Key Road Landfill ACM and CAP Activities

- The JV will revise the Key Road assessment of corrective measures (ACM) report within 10 days of receipt of the VOC analytical data for groundwater samples collected from KR-GWC-4, -4D, and -13.
- The JV will submit the revised Key Road ACM to the EPD and upon the EPD's approval, the JV will prepare both a corrective action plan (CAP) and a minor modification for Key Road Landfill and submit them to the EPD.

Task 3.2.3 - Key Road Landfill Public Meeting Activities

- The JV will host a public meeting to present the Key Road ACM and CAP within 60 days of the EPD's approval of the Key Road CAP and minor modification.

Task 3.3 - Key Road Landfill Methane Compliance Assessment

Ongoing methane exceedances have been observed compliance in the area of MM-18 along the common boundary with the adjoining APAC Donzi Lane landfill. In order to better understand landfill gas control in this area, the City has been collecting landfill methane gas and pressure since September 2007. The JV will address the landfill gas control issue by performing the following activities:

- The JV will compile landfill methane and well head pressure data collected by the City and prepare a letter report of the data.
- The JV will prepare for and attend two meetings with the EPD to will present this letter report and discuss landfill compliance issues in this area of MM-18. The JV assumes up to two days will be required to prepare for each meeting, each meeting will be attended by three JV personnel, and each meeting will be held at EPD headquarters.
- The JV understands that the existing landfill gas extraction system is operating as designed and information provided by the City will be accurate and adequate to for the JV develop an assessment of this area. This understanding is based on information provided by the City and discussions with City personnel.

Task 3.4 – Gun Club Road Landfill Methane Monitor Network Revision and CAP Implementation

Task 3.4.1 - Methane Monitor Network Expansion and Minor Modification

On May 11, 2006 the EPD issued a NOD to the City for the Gun Club Road Landfill. The EPD issued the NOD due to methane exceedances at the compliance boundary for the site. Specifically, MM-9R was abandoned, but the installation of replacement wells MM-11 and MM-9 was not approved by the EPD, because data from these wells do not demonstrate compliance at the property boundary south of MM-9. In addition, the EPD previously requested the installation of MMPs south and east of the waste mass to demonstrate methane is not migrating offsite in these areas. The EPD requested the City submit a minor modification in response to the NOD. The JV will perform the following tasks to comply with the NOD:

- Prepare minor modification to the plan for submittal to EPD. The plan will be prepared in accordance with EPD criteria and will include a full-sized CADD drawing that illustrates the location of the proposed MMP network. The figure will also include a well construction diagram of the MMP. Text describing the rationale selected for construction and placement of the MMPs will accompany the drawing.
- Install seven MMPs along the Gun Club Road and Baby Gun Club Road Landfills.

- Submit final as-built drawings of the minor modification plan.
- Attend up to 5 meetings with the City to discuss the work.
- Attend up to two meetings at EPD headquarters to discuss the minor modification plan.

Task 3.4.2 – GC-GWC-7 CAP Implementation

In March 2005, the EPD approved the ACM Report addressing remedial options for the occurrence of vinyl chloride in groundwater in monitoring well GWC-7. The ACM Report selected monitored natural attenuation (MNA) as the corrective action for groundwater in the area of GWC-7. Based on the trend data available at the time, it was estimated that vinyl chloride concentrations would attenuate to below the groundwater protection standard (GWPS) of 2.0 micrograms per liter (µg/L) by December 2007. Test Data collected since March 2005, suggest that vinyl chloride is not attenuating as rapidly as estimated. Therefore, the City will be required to implement the EPD-approved in situ Submerged Oxygen Curtain (iSOC®) to reduce vinyl chloride to below the GWPS. Implementation of iSOC® will be performed as follows:

- The JV will install up to 3 injection wells immediately upgradient of GWC-7 to inject industrial-grade oxygen to enhance the oxidation of vinyl chloride in groundwater. iSOC® injection will continue until vinyl chloride is below the GWPS for one year.
- Soil cuttings and waste generated during construction/drilling will be containerized by the contractor(s) and disposed by the City.

Task 3.5 – Cascade Road Landfill Buffer Property Activities

Task 3.5.1 - Subcontractor Procurement & Management

Cascade Road landfill has buffer property on all flanks except to the south. Several parcels reside between the landfill's southern boundary and Cascade Road. Landfills should have environmental buffers around the entire footprint to prevent encroachment for necessary post-closure repairs, refurbishments, or remedial actions. The environmental buffer around the Cascade Road landfill could be completed if the City purchased the south adjoining parcels, totaling approximately 15 acres. The JV will provide the following services assist with purchase of the properties in this task:

- Procure and manage a real estate subcontractor to appraise up to eight (8) properties that adjoin the southeastern portion of the Cascade Road Landfill. All appraisals by the real-estate subcontractor will include: title search, appraisals and appraisals review, right-of-entry and acquisition negotiations with parcel owners, attorney closings, title update and insurance, title recording, and condemnation avoidance.
- Procure and manage a Georgia licensed-professional surveyor to survey up to eight (8) properties that adjoin the southeastern portion of the Cascade Road Landfill.

- Prepare for and attend two meetings with the real estate and survey subcontractor to discuss the work associated with the appraisals. The JV assumes each meeting will be attended by no more than two JV personnel and the meetings will be held at the Cascade Road Landfill.

Task 3.5.2 – Regulatory/Compliance Support

The JV has included this task to provide regulatory / compliance support for the City and to interact with EPD during the appraisal process. The JV has included this task for general engineering consulting services to address potential issues that may arise from discovery during the appraisal and survey that may delay or alter the course of the appraisal process. These services anticipated are:

- Developing updates, requests, and responses to EPD arising from the appraisal process that may impact the City's compliance obligations to EPD. For costing purposes, the JV has assumed that we will prepare up to four letters will be prepared for the City to send to EPD and respond up to four response letters from will be prepared for submission to EPD.
- Preparing for and attending two meetings with the EPD to discuss landfill compliance issues. The JV assumes up to 8 hours will be required to prepare for each meeting, each meeting will be attended by two JV personnel, and each meeting will be held at EPD headquarters.
- Preparing for and attend up to 2 meetings with DPW staff to update DWP staff on the appraisal process at the Cascade Road Landfill. The JV assumes each meeting will be attended by no more than two JV personnel and the meetings will be held at City Hall (downtown Atlanta).

Task 3.5 Assumptions

The JV has made the following assumptions to complete the appraisal work:

- The City will provide the JV and its subcontractor's access to the Cascade Road Landfill to perform both the appraisal and surveying tasks and any applicable meetings.
- The City will provide the JV and its subcontractor with all necessary information to perform the above listed tasks.
- As part of the appraisal process, the real estate subcontractor will be able to secure the right of trespass for the Georgia licensed-professional surveyor to survey up to eight (8) properties that adjoin the southeastern portion of the Cascade Road landfill as part of the appraisal process.

Task 3.6 – Key Road Landfill Gas-to-Energy Viability Review

Background

The Key Road Landfill is approximately 76 acres, was operated as a sanitary landfill beginning in 1969 and was permitted by the EPD as a non-hazardous municipal landfill in 1977. Landfill closure was initiated in 1997 in compliance with EPD Consent Order EPD-SW-1106. Closure included the following activities: 1) installation of a low permeability cap, 2) installation of a landfill gas collection system and flare, and 3) installation of a groundwater and methane gas monitoring system. Landfill gas (LFG) collection is currently performed for compliance purposes with the destruction of methane gas and other non-methane organic compounds through flaring. The LFG that is currently being flared at the site has potential to be developed in to a useable source of energy.

Purpose

The City has requested the JV to review the viability of a landfill gas to energy (LFGTE) opportunities. The JV will review the financial and economic viability provisions for the option selected by the City.

Scope of Services - Review the Financial and Economic Viability for the selected LFGTE Utilization Option

The JV will review the basic financial and economic aspects of a LFGTE project that the City has selected. Upon completion of the review, the JV will prepare a brief report in a technical memorandum (TM) format that summarizes this review effort.

To prepare the evaluation report, the JV will combine technical conceptual design information and probable construction cost estimate data provided by the City with information obtained from a site visit with City representatives and the JV. The TM will provide general recommendations in the TM that are based on the information, data, and operational history of the LFG system at the Key Road Landfill. The JV will prepare the TM on a draft basis and submit it to the City for review. The JV will facilitate one meeting (assumed to be at either City or the Atlanta CH2M HILL office) with representatives from the City to discuss/review the TM. Upon completion of the review meeting and receipt of one round of comments from both parties, the JV will finalize and submit the final TM.

Deliverables

The JV will provide the following deliverables Ten (10) draft and ten (15) final hard copies of the TM to the City, identified above. To the extent possible, deliverables will be submitted in electronic format to the City prior to the meeting. Electronic files of documents will be provided in MS Word, PowerPoint and/or EXCEL format. Figures will be provided in pdf and/or AutoCAD Version 14 format or other formats as mutually agreed.

Meetings

The JV will participate, with the City, in one (1) TM meeting. This meeting is budgeted to be attended by the Project Manager and Senior Project Manager to discuss the objectives of this task. The duration of the meeting is assumed to be up to 4 hours.

Assumptions

The JV understands that the information, data, and operational history of the existing LFG system provided by the City will be accurate and adequate to develop a conceptual review to provide viability recommendations. The subcontract/vender costs include an 8% markup.

Schedule

The groundwater and surface water monitoring task (Task 1.0) will be initiated upon the City's approval and will be conducted in accordance with the existing semi-annual sampling schedule (November 2008 and May 2009). MRP construction activities (Task 2.0) and implementation of Task 3.0 (Engineering & Regulatory Services) will commence with 10 working days of receipt of the NTP.

Cost

We have prepared this proposal with the understanding that our proposal will be awarded in its entirety, if accepted, and that this work will be performed under the terms and conditions of Cit of Atlanta Architectural and Engineering Services Agreement # FC-7619-03C between the City and the JV.

We look forward to working with you on this project. If you have any questions or require additional information, please contact me at (678) 530-4093, Thomas E. Kessler at (678) 530-4197, or Jonathan Grimes at (678) 530-4146.

Sincerely,

CH2M HILL/WRJ - A JOINT VENTURE



Gerri Dickerson, P.E., CH2M HILL Senior Vice President
JV Program Manager



Fred Artis, WRJ, Inc.
JV Deputy Program Manager

Mr. Swope
Page 14 of 14
September 15, 2008

Attachment

c: James Swope, Department Manager, City of Atlanta
Carla Lipscomb, Solid Waste Disposal Operations Manager, City of Atlanta
Thomas E. Kessler, CH2M HILL
Jonathan Grimes, CH2M HILL

TABLE 3
Summary of CH2M HILL/WRJ JV Cost Estimates for
Q3 2008 - Q2 2009
City of Atlanta A/E Services Contract - FC-7619-04C

Q3 2008 thru Q2 2009 Proposal for Ongoing Post-closure Care Services			
Task & Description	Subtask Estimated Totals	Task Estimated Cost	
Task 1.0 - Groundwater and Surface Water Monitoring and Reporting	\$312,447	\$312,447	
Task 2.0 - Ongoing Post-Closure Care Construction and Maintenance	\$753,415	\$753,415	
Task 3.0 - Engineering and Regulatory Services		\$911,472	
Task 3.1 - General Services	\$269,080		
Task 3.2 - Key Road ACM Activities			
Task 3.2.1 - GWC-4 MC Delineation	\$88,247		
Task 3.2.2 - ACM and CAP Reports	\$62,734		
Task 3.2.3 - ACM Public Meeting	\$56,834		
Task 3.3 - Key Road Methane Compliance Assessment	\$44,717		
Task 3.4 - Gun Club Road Methane Monitor Network Revision & CAP Implementation			
Task 3.4.1 - Methane Monitor Plan Revision	\$110,421		
Task 3.4.2 - CAP Implementation	\$94,111		
Task 3.5 - Cascade Road Buffer Property Activities			
Task 3.5.1 - Sub Procurement & Mgt.	\$119,677		
Task 3.5.2 - Reg./Comp Support	\$16,145		
Task 3.6 - Key Road LFGTE Viability Study	\$49,506		
Total:	\$1,977,334	\$1,977,334	

TABLE 3

TABLE 4

TABLE 3
Summary of CH2M HILL/WRL JV Cost Estimates for
Q3 2008 - Q2 2009
City of Atlanta A/E Services Contract - FC-7619-04C

TABLE 5 SUMMARY OF COST ESTIMATE Task 2.0 - Ongoing Post-Closure Care Construction and Maintenance Q3 2008 thru Q2 2009 Proposal for Ongoing Post-closure Care Services City of Atlanta A/E Services Contract - FC-7619-04C						
1. LABOR	Labor Category	Labor Rate	Task 2.0 - Ongoing PCC Construction & Maintenance		Total Hours	Total Cost
			Cascade Road	Key Road		
	Engineer 8	\$174.74	24	24	48	\$8,388
	Engineer 7	\$150.14	56	56	112	\$16,816
	Project Manager	\$132.86	360	360	720	\$95,659
	Engineer 6	\$123.11	20	20	40	\$4,924
	Engineer 5	\$100.13	360	360	720	\$72,094
	Engineer 4	\$83.46	20	20	40	\$3,338
	Engineer 3	\$71.79	20	20	40	\$2,872
	OFFICE/Designer 1	\$55.96	20	20	40	\$2,238
	Designer 4	\$92.22	60	60	120	\$11,066
TOTAL LABOR			940	940	1,880	\$217,395
2. INTERNAL EXPENSES						
	Category	Rate	# of Units	# of Units	Total Quantity	Total Cost
	Copies (each)	\$0.06	2,400	2,300	4,700	\$282
	Car Travel (per day)	\$42.00	30	30	60	\$2,520
	Truck Travel (per day)	\$68.00	2	2	4	\$272
TOTAL INTERNAL EXPENSES			\$1,540	\$1,534		\$3,074
3. EXTERNAL EXPENSES						
	Category	Rate			Total	Total Cost
	Shipping/Postage	Cost				\$300
	Subcontracting MRP Subcontractor	Cost	\$150	\$150		\$493,490
	Subcontracting Surveyor	Cost	\$428,894	\$64,596		\$36,000
	Equipment/Supplies	Cost	\$18,000	\$18,000		\$3,000
	Miscellaneous	Cost	\$1,500	\$1,500		\$155
		Cost	\$80	\$75		
SUBTOTAL EXTERNAL EXPENSES			\$448,624	\$84,321		\$532,945
INDIVIDUAL SITE TOTALS						
TASK TOTAL			\$558,862	\$194,553		\$753,415

TRANSMITTAL FORM FOR LEGISLATION

TO: MAYOR'S OFFICE

ATTN: GREG PRIDGEON

Dept.'s Legislative Liaison: Soraya BelgraveContact Number: (404) 330-6002Originating Department: Department of Public WorksCommittee(s) of Purview: City Utilities CommitteeChief of Staff Deadline: October 15, 2008Anticipated Committee Meeting Date(s): October 28, 2008Anticipated Full Council Date: November 3, 2008Legislative Counsel's Signature: Saul SchultzCommissioner Signature: [Signature]Chief Procurement Officer Signature: [Signature]**CAPTION**

A RESOLUTION AUTHORIZING THE MAYOR, OR HER DESIGNEE, TO ISSUE A NOTICE TO PROCEED WITH CH2MHILL/WRJ-JV FOR FC7619-03C, ANNUAL CONTRACT FOR ARCHITECTURAL AND ENGINEERING SERVICES, FOR THE PURPOSE OF PERFORMING CERTAIN ENGINEERING SERVICES THE CITY MUST COMPLETE AS A RESULT OF CLOSING ITS LANDFILLS AND PURSANT TO THE STATE OF GEORGIA RULES AND REGULATIONS AND FOR OTHER COMPLIANCE PURPOSES, ON BEHALF OF THE DEPARTMENT OF PUBLIC WORKS, IN AN AMOUNT NOT TO EXCEED ONE MILLION NINE HUNDRED SEVENTY SEVEN THOUSAND THREE HUNDRED THIRTY FOUR DOLLARS (\$1,977,334.00) WITH ALL CONTRACED WORK BEING CHARGED TO AND PAID FROM FUND DEPARTMENT ORGANIZATION AND ACCOUNT NUMBER: (FDOA) 5401 (SOLID WASTE SERVICES REVENUE FUND), 130212 (DPW LANDFILL CLOSURE AND POST CLOSURE), 5212001 (CONSULTING/PROFESSIONAL SERVICES), 4560000 (CLOSURE AND POSTCLOSURE CARE); AND FOR OTHER PURPOSES.

Mayor's Staff Only

Received by CPO: _____
(date)Received by LC from CPO: _____
(date)Received by Mayor's Office: 10/15/08 Anne Reviewed by: [Signature]
(date) (date)

Submitted to Council: _____